

ABSTRACT

AGGLOMERATED ZEOLITIC ADSORBENTS, THEIR PROCESS OF
PREPARATION AND THEIR USES

The present invention relates to agglomerated zeolitic adsorbents based on zeolite X with an Si/Al ratio such that $1.15 < \text{Si/Al} \leq 1.5$, at least 90% of the exchangeable cationic sites of the zeolite X of which are occupied either by barium ions alone or by barium ions and potassium ions whose Dubinin volume is greater than or equal to $0.240 \text{ cm}^3/\text{g}$.

They are obtained by agglomerating zeolite powder with a binder, followed by the zeolitization of the binder, the exchange of the ions of the zeolite by barium ions (and potassium ions) and the activation of the adsorbents thus exchanged.

These adsorbents are particularly suited to the adsorption of the para-xylene present in C₈ aromatic hydrocarbon fractions in the liquid phase in processes of simulated moving bed type but also to the separation of sugars, polyhydric alcohols, cresols or substituted toluene isomers.